

PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: MMYYYY-###

Expiration Date:

Installation ID: 223-0019 Project Number: 2020-06-036

Owner/Operator Name and Address

Kerry Ingredients & Flavours 4742 Wayne Route E Greenville, MO 63944 Wayne County

Installation Description:

Kerry Ingredients & Flavours owns and operates a liquid smoke manufacturing facility in Greenville, Missouri. Liquid smoke is produced by burning hardwood sawdust in an oxygen deficient atmosphere (pyrolysis) in a series of calciners. The smoke generated by these calciners is condensed and then refined to create the liquid smoke product.

Kerry Ingredients and flavors has the potential to emit Carbon Monoxide (CO) above the Part 70 "major source" threshold level of one hundred (100) tons per year. The installation does not emit a significant amount of HAPs.

Effective Date	Director or Designee
	Department of Natural Resources

Table of Contents

I. INSTALLATION EQUIPMENT LISTING	4
EMISSION UNITS WITH LIMITATIONS EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS	
II. PLANT WIDE EMISSION LIMITATIONS	5
PERMIT CONDITION PW001	4
10 CSR 10-6.060 Construction Permits Required.	
Construction Permit No. 082018-008, Issued August 07, 2018	
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	
SAWDUST DRYING, CALCINING OPERATION, HAMMERMILL, AND EVAPORATOR	6
Permit Condition 001	
EU-2A, EU-2B, EU-2D, and EU-3	6
10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants	
Permit Condition 002	
EU-2A, EU-2B, EU-3, and EU-7	
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds	8
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions	8
Permit Condition 003	
EU-2B	
10 CSR 10-6.060 Construction Permits Required	
Construction Permit No. 082018-008, Issued August 07, 2018	
Sawdust Dryer 2 – Fuel Requirement, Special Condition 3	
Permit Condition 004	
EU-2D	
10 CSR 10-6.060 Construction Permits Required	
Construction Permit No. 082018-008, Issued August 07, 2018	
Hammermill – Control Device Requirement, Special Condition 1 Permit Condition 005	
EU-3	
10 CSR 10-6.060 Construction Permits Required.	
Construction Permit No. 082018-008, Issued August 07, 2018	
Calciners – Control Device Requirement, Special Condition 2	
EMERGENCY GENERATOR	
Permit Condition 006	
EU-9	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	12
40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for	
Stationary Reciprocating Internal Combustion Engines	
Permit Condition 007	18
EU-9	18
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds	
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions	18
IV. CORE PERMIT REQUIREMENTS	19
V. GENERAL PERMIT REQUIREMENTS	25
VI. ATTACHMENTS	31

ATTACHMENT A	32
Fugitive Emission Observations.	32
ATTACHMENT B	33
Method 22 Visible Emissions Observations	33
ATTACHMENT C	34
Method 9 Opacity Observations	34
ATTACHMENT D	36
10 CSR 10-6.260 and 261 Compliance Demonstration	36
ATTACHMENT E	
Inspection/Maintenance/Repair/Malfunction Log	37

I. Installation Equipment Listing

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

	Emission Unit	Description of Emission Unit
	EU-2A	Dryer 1 - Web Burner
	EU-2B	Dryer 2 – Onix Burner
	EU-2D	Hammer Mill
	EU-3	Calciners
	EU-7	Evaporator
-	EU-9	Emergency Generator

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Emission Unit	Description of Emission Unit
EU-1	Sawdust Truck Unlading Area (Sawdust Delivery, Storage, and Sizing)
EU-1A	Haul Roads
EU-4	Charcoal Loading
EU-5	Production Storage Tanks (ASTs)
EU-8	Two (2) Cooling Towers
EU-10	Natural Gas-fired 0.5 MMBtu/hr Hot Water Heater for AST Heat Jackets
EU-11	Natural Gas-fired 0.5 MMBtu/hr Hot Water Heater for AST Heat Jackets
EU-12	One (1) 500 Gallon Diesel Fuel Storage Tan k

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Specific Limitations.

PERMIT CONDITION PW001

10 CSR 10-6.060 Construction Permits Required Construction Permit No. 082018-008, Issued August 07, 2018

Modification to Release Parameters Requirement: [Special Condition 4]

The permittee shall notify the Air Pollution Control Program prior to making any modifications to the facility that impact the release parameters and/or emission rates listed in the memo: *Ambient Air Quality Impact Analysis (AAQIA) for Kerry Ingredients & Flavours* – 2017-12-014. In the event that the Air Pollution Control Program determines the changes are significant, the permittee shall submit an updated AAQIA indicating compliance with the National Ambient Air Quality Standards (NAAQS).

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

Sawdust Drying, Calcining Operation, Hammermill, and Evaporator						
Emission Unit	Description					
EU-2A	Dryer 1 - Web Burner with Cyclone:					
	5.4 MMBtu/hr (Fuel - Natural Gas, Saw Dust, Wood Tar)					
	Max Wet Sawdust Throughput to Dryer 1 – 3 tons/hr					
EU-2B	Dryer 2 - Onix Burner with Cyclone:					
	52 MMBtu/hr (Fuel - Natural Gas, Saw Dust, Wood Tar)					
	Max Wet Sawdust Throughput to Dryer 2 – 20 tons/hr					
EU-2D	Hammer Mill –Crusher with Baghouse					
EU-3	Calciners with Scrubbers : (Fuel - Natural Gas/Non Condensable Gas)					
	• #1 through #3: 6.2 MMBtu/hr,					
	• #4: 2.1 MMBtu/hr, and					
	• #5 & #6: 37.8 MMBtu/hr					
EU-7	Evaporator (Natural Gas-fired 1.9 MMBtu/hr Process Water Heater)					

Permit Condition 001 EU-2A, EU-2B, EU-2D, and EU-3

10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants ¹

Emission Limitation:

- 1) The permittee shall not cause or permit to be discharged into the atmosphere from these emission units any visible emissions with an opacity greater than 20 percent for any continuous six-minute period. [10 CSR 10-6.220(3)(A)1]
- 2) Exception: The permittee may discharge into the atmosphere from any emission unit visible emissions with an opacity up to 60 percent for one continuous six-minute period in any 60 minutes. [10 CSR 10-6.220(3)(A)2]
- 3) Failure to demonstrate compliance with 10 CSR 10-6.220(3)(A) solely because of the presences of uncombined water shall not be a violation. [10 CSR 10-6.220(3)(B)]

Monitoring:

- 1) Monitoring schedule:
 - a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then:

¹ This permit condition reflects the requirements of 10 CSR 10-6.220 as contained in Missouri's State Implementation Plan (SIP) and Missouri's Code of State Regulations (CSR). Both versions of this regulation apply the same requirements to the same emission units at this installation. Once the current CSR version is incorporated into the SIP, this permit condition continues to apply as written.

- Project No. 2020-06-036
- i) The permittee shall conduct observations once every two weeks for a period of eight weeks. If a violation is noted, the permittee shall revert to weekly monitoring. Should no violation of this regulation be observed during this period then:
- ii) The permittee shall conduct observations once per month. If a violation is noted, the permittee shall revert to weekly monitoring.
- 2) If the permittee reverts to weekly monitoring at any time, the monitoring schedule shall progress in an identical manner from the initial monitoring schedule.
- 3) Observations are only required when the emission units are operating and when the weather conditions allow.
- 4) Issuance of a new, amended, or modified operating permit does not restart the monitoring schedule.
- 5) The permittee shall conduct visible emissions observation on these emission units using the procedures contained in U.S. EPA Test Method 22. Each Method 22 observation shall be conducted for a minimum of six-minutes. If no visible emissions are observed from the emission unit using Method 22, then no Method 9 is required for the emission unit.
- 6) For emission units with visible emissions, the permittee shall have a certified Method 9 observer conduct a U.S. EPA Test Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin with a Method 9 opacity observation. The certified Method 9 observer shall conduct each Method 9 opacity observation for a minimum of 30-minutes.

Record Keeping:

- 1) The permittee shall maintain records of all observation results for each emission unit using Attachments B and C or equivalent forms.
- 2) The permittee shall make these records available within a reasonable period of time for inspection to the Department of Natural Resources' personnel upon request.
- 3) The permittee shall retain all records for five years.

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3, no later than ten days after an exceedance of the emission limitation.
- 2) The permittee shall report any deviations from the requirements of this permit condition in the semiannual monitoring report and annual compliance certification required by Section V of this permit.

Permit Condition 002 EU-2A, EU-2B, EU-3, and EU-7

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds ² 10 CSR 10-6.261 Control of Sulfur Dioxide Emissions

Emission Limitation:

The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source (dryer burners, calciner burners, and the evaporator) in excess of eight (8) pounds of sulfur dioxide per million Btus actual heat input averaged on any consecutive three hour time period. [10 CSR 10-260(3)(B)2.A.] and [10 CSR 10-6.261(3)(B)1.]

Operational Limitation:

For emission units combusting natural gas: the permittee shall comply with the record keeping requirements of 10 CSR 10-6.261(4). [10 CSR 10-6.261(1)(A)]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain a record of data, calculations, results, records, and reports from all fuel deliveries. [10 CSR 10-6.261(4)(A)3.]
- 2) The permittee shall retain the potential to emit calculations in Attachment D, which demonstrate that the above emission limitation will never be exceeded.
- 3) The permittee must maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable: [10 CSR 10-6.261(4)(C)]
 - a) The name, address, and contact information of the fuel supplier; [10 CSR 10-6.261(4)(C)1.]
 - b) The type of fuel; [10 CSR 10-6.261(4)(C)2.]
 - c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and [6.261(4)(C)3.]
 - d) The heating value of the fuel. [10 CSR 10-6.261(4)(C)4.]
- 4) The permittee must retain all required reports and records on-site for a minimum of five years and make available within five business days upon written or electronic request by the director. [10 CSR 10-6.261(4)(F)]
- 5) The permittee must furnish the director all data necessary to determine compliance status. [10 CSR 10-6.261(4)(G)]

Reporting:

1) The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be written and include the information listed in 10 CSR 10-6.261(4)(A)1.

2) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102, or electronically as outlined in 40 CFR Part 3.

² 10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in State Implementation Plan.

The provisions of 10 CSR 10-6.260 will expire, once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action.

Permit Condition 003 EU-2B

10 CSR 10-6.060 Construction Permits Required Construction Permit No. 082018-008, Issued August 07, 2018 Sawdust Dryer 2 – Fuel Requirement, Special Condition 3

Fuel Requirement - Sawdust Dryer

The permittee shall limit the amount of sawdust combusted in the burner of Sawdust Dryer 2 (EU-2B) to no greater than 30% by weight of total fuel combusted, on annual basis. [Special Condition 3.A.]

Monitoring/Recordkeeping:

- 1) The permittee shall demonstrate compliance with Special Condition 3.A by keeping a record of the amount and type of fuel combusted in EU-2B. These records shall contain, at a minimum, the following information: [Special Condition 3.B.]
 - a) Installation name & ID number.
 - b) Permit number.
 - c) Current month & 12 month date range.
 - d) Type of fuel combusted (wood tar, sawdust, natural gas).
 - e) Amount of each type of fuel combusted (lbs).
 - f) Indication of compliance with Special Condition 3.A.
- 2) The permittee shall maintain all records required by this permit condition for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 5.A.]

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section by mail at P.O. Box 176, Jefferson City, MO 65102, or electronically as outlined in 40 CFR Part 3, no later than 10 days after the end of the month during which any record required by this permit condition shows an exceedance of a limitation imposed by Construction Permit No. 082018-008. [Special Condition 5.B.]
- 2) The permittee shall report any deviations from the requirements of this permit condition in the semiannual monitoring report and annual compliance certification required by Section V of this permit.

Permit Condition 004 EU-2D

10 CSR 10-6.060 Construction Permits Required Construction Permit No. 082018-008, Issued August 07, 2018 Hammermill – Control Device Requirement, Special Condition 1

Control Device Requirement – Baghouse:

- 1) The permittee shall control emissions from the new Hammermill (EU-2D) using a baghouse, as specified in the Permit No. 082018-008 application. [Special Condition 1.A.]
- 2) The permittee shall operate and maintain the baghouse in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. This gauge or meter shall be located such that Department of Natural Resources' employees may easily observe it. [Special Condition 1.B.]
- 3) The permittee shall have replacement filters for the baghouse kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance). [Special Condition 1.C.]

Monitoring/Recordkeeping:

- 1) The permittee shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty. [Special Condition 1.D.]
- 2) The permittee shall maintain a copy of the baghouse manufacturer's performance warranty on site. [Special Condition 1.E.]
- 3) The permittee shall maintain an operating and maintenance log for the baghouse, which shall include the following: [Special Condition 1.F.]
 - a) Incidents of malfunction, with impact on emissions (tons), duration of event, probable cause, and corrective actions; and [Special Condition 1.F.1)]
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc. [Special Condition 1.F.2)]
- 4) The permittee shall maintain all records required by this permit condition for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 5.A.]

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3, no later than 10 days after the end of the month during which any record required by this permit condition shows an exceedance of a limitation imposed by Construction Permit No. 082018-008. [Special Condition 5.B.]
- 2) The permittee shall report any deviations from the requirements of this permit condition in the semiannual monitoring report and annual compliance certification required by Section V of this permit.

Permit Condition 005 EU-3

10 CSR 10-6.060 Construction Permits Required Construction Permit No. 082018-008, Issued August 07, 2018 Calciners – Control Device Requirement, Special Condition 2

Control Device Requirement – Flare:

- 1) The permittee shall control VOC emissions from the Scrubber (EU-3) using a flare, as specified in the Permit No. 082018-008 application. [Special Condition 2.A.]
- 2) The permittee shall operate and maintain the flare in accordance with the manufacturer's specifications. A copy of the manufacturer's specifications shall be kept onsite. [Special Condition 2.B.]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an operating and maintenance log for the flare, which shall include the following: [Special Condition 2.C.]
 - a) Incidents of malfunction, with impact on emissions (tons), duration of event, probable cause, and corrective actions; and
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3, no later than 10 days after the end of the month during which any record required by this permit condition shows an exceedance of a limitation imposed by Construction Permit No. 082018-008. [Special Condition 5.B.]
- 2) The permittee shall report any deviations from the requirements of this permit condition in the semiannual monitoring report and annual compliance certification required by Section V of this permit.

Emergency Generator					
Emission Unit	Description				
EU-9	Emergency Generator – Diesel-Fired 230 KW 1983 Model				

Permit Condition 006 EU-9

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Emission Limitation:

The permittee must comply with the requirements in Table 2d to Subpart ZZZZ of 40 CFR Part 63 which apply to the facility (listed below). [40 CFR §63.6603(a)]

For each	The permittee must meet the following requirement, except during periods of startup	
Emergency CI RICE ² [Item 4 of Table 2d]	 a. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹ b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. 	

- The permittee has the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ
- If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

Monitoring, Operation and Maintenance Requirements:

- 1) The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop the permittee's maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]
- 2) The permittee must install a non-resettable hour meter if one is not already installed. [40 CFR §63.6625(f)]
- 3) The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30

- Project No. 2020-06-036
- minutes, after which time the emission standards applicable to all times other than startup in Table 2d to Subpart ZZZZ of Part 63 apply. [40 CFR §63.6625(h)]
- 4) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to Subpart ZZZZ of 40CFR Part 63. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to Subpart ZZZZ of 40 CFR Part 63. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. If any of the limits are exceeded, the permittee must change the oil before continuing to use the engine. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

Compliance Requirements:

- 1) The permittee must be in compliance with the operating limitations in Subpart ZZZZ of 40 CFR Part 63 that apply to the permittee at all times. [40 CFR §63.6605(a)]
- 2) The permittee must monitor and collect data according to §63.6635.
 - a) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR §63.6635(b)]
 - b) The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. [§63.6635(c)]
- 3) The permittee must demonstrate continuous compliance with each operating limitation in Tables 2d to Subpart ZZZZ of 40 CFR Part 63 that apply to the permittee according to methods specified below (from Table 6 to Subpart ZZZZ of 40 CFR Part 63). [40 CFR §63.6640(a)]

For Each	Complying with the requirements to	The permittee must demonstrate continuous compliance by
Existing stationary RICE not subject to any numerical emission limitations	Work or Management practices	i Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- 4) The permittee must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1), (f)(1)(i), (f)(2), (f)(2)(i) and(f)(4)(ii) of 40 CFR §63.6640. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of 40 CFR §63.6640, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of §63.6640, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [40 CFR §63.6640(f)]
 - a) There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR \$63.6640(f)(1)]
 - b) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) of §40 CFR 63.6640 for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(4) of 40 CFR §63.6640 counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). [§63.6640(f)(2)]
 - i) The emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

 [40 CFR §63.6640(f)(2)(i)]
 - c) The emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of 40 CFR §63.6640. Except as provided in paragraph (f)(4)(ii) of 40 CFR §63.6640, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR §63.6640(f)(4)(ii)]

- Project No. 2020-06-036
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [40 CFR §63.6640(f)(4)(ii)(A)]
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR §63.6640(f)(4)(ii)(B)]
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR §63.6640(f)(4)(ii)(C)]
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR §63.6640(f)(4)(ii)(D)]
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [40 CFR §63.6640(f)(4)(ii)(E)]

Recordkeeping:

- 1) The permittee must keep the records described in paragraphs (a)(2) and (a)(5). [40 CFR §63.6655(a)]
 - a) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR §63.6655(a)(2)]
 - b) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b). [40 CFR §63.6655(a)(5)]
- 2) The permittee must keep the records required in Table 6 of Subpart ZZZZ of 40 CFR Part 63 to show continuous compliance with each emission or operating limitation that applies to the permittee. [40 CFR §63.6655(d)]
- 3) The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1). [40 CFR §63.6660(a)]
- 4) As specified in 40 CFR §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR §63.6660(b)]
- 5) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1). [40 CFR §63.6660(c)]

- 1) The permittee must report each instance in which the permittee did not meet each operating limitation in Table 2d to Subpart ZZZZ of 40 CFR Part 63 that applies. These instances are deviations from the emission and operating limitations in Subpart ZZZZ of 40 CFR Part 63. These deviations must be reported according to the requirements in 40 CFR §63.6650. [40 CFR §63.6640(b)]
- 2) The permittee must also report each instance in which the permittee did not meet the applicable requirements in Table 8 to Subpart ZZZZ of 40 CFR Part 63 Applicability of General Provisions to Subpart ZZZZ. [40 CFR §63.6640(e)]
- 3) Reporting requirements [40 CFR §63.6650]
 - a) Pursuant to 40 CFR §63.6650(b)(5), the permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Missouri Air Compliance Coordinator at EPA region 7 with complimentary copies to the Air

- Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit instead of according to the dates specified in in paragraphs (b)(1) through (b)(4) of §63.6650.
- b) The Compliance report must contain the information in paragraphs (c)(1) through (6) of 40 CFR §63.6650. [40 CFR §63.6650(c)]
 - (1) Company name and address. [40 CFR §63.6650(c)(1)]
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR §63.6650(c)(2)]
 - (3) Date of report and beginning and ending dates of the reporting period. [40 CFR §63.6650(c)(3)]
 - (4) If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR §63.6605(b), including actions taken to correct a malfunction. [40 CFR §63.6650(c)(4)]
 - (5) If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]
- c) For each deviation from operating limitation that occurs for the stationary RICE where the permittee is not using a CMS to comply with the emission or operating limitations in Subpart ZZZZ of 40 CFR Part 63, the Compliance report must contain the information in paragraphs (c)(1) through (4) of 40 CFR §63.6650 and the information in paragraphs (d)(1) and (2) of 40 CFR §63.6650. [40 CFR §63.6650(d)]
 - (1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [40 CFR §63.6650(d)(1)]
 - (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR §63.6650(c)(2)]
- d) The permittee must report all deviations as defined in Subpart ZZZZ of 40 CFR Part 63 in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). [40 CFR §63.6650(f)]
- e) If the permittee operates the emergency stationary RICEs for the purpose specified in §63.6640(f)(4)(ii) (item 4c Compliance Requirements of this Permit Condition), the permittee must submit an annual report according to the requirements in §63.6650 (h)(1) through (3) except §63.6650 (h)(1) (v) and (vi) (listed below). [§63.6650(h)]
 - (1) The report must contain the following information: [§63.6650 (h)(1)]
 - (i) Company name and address where the engine is located. [§63.6650 (h)(1)(i)]
 - (ii) Date of the report and beginning and ending dates of the reporting period. [§63.6650 (h)(1)(ii)]
 - (iii) Engine site rating and model year. [§63.6650 (h)(1)(iii)]
 - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [§63.6650 (h)(1)(iv)]
 - (v) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [§63.6650 (h)(1)(vii)]

- Project No. 2020-06-036
- (vi) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period. [§63.6650 (h)(1)(viii)]
- (vii) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken. [§63.6650 (h)(1)(ix)]
- (2) The permittee must submit the subsequent annual reports for each calendar year no later than March 31 of the following calendar year. [§63.6650 (h)(2)]
- (3) The permittee must submit the annual report electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13. [§63.6650 (h)(3)]

Permit Condition 007 EU-9

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds³ 10 CSR 10-6.261 Control of Sulfur Dioxide Emissions

Emission Limitation:

- 1) The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period from the Emergency Generators. [10 CSR 10-6.260(3)(A)2.]
- 2) The permittee must limit the fuel sulfur content of the fuel oil to no more than 8,812 parts per million (ppm). [10 CSR 10-6.261(3)(C)]

Compliance Demonstration:

The permittee must determine compliance with the fuel sulfur content limitation of this permit condition as follows:

- 1) Fuel delivery records; or
- 2) Fuel sampling and analysis; or
- 3) Fuel supplier certification letters may be used as an alternate method of compliance.

Recorkeeping:

- 1) The permittee must maintain fuel delivery/purchase receipts and/or fuel sampling tests as applicable or fuel oil supplier certification letters.
- 2) The permittee must maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
 - a) The name, address, and contact information of the fuel supplier;
 - b) The type of fuel (diesel or #2 fuel oil);
 - c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
 - d) The heating value of the fuel.
- 3) The permittee must use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) in accordance with 10 CSR 10-6.040. This requirement does not apply if the permittee uses the fuel supplier certification as a method of compliance.
- 4) The permittee must retain all reports and records on-site for a minimum of five (5) years and make available within five (5) business days upon written or electronic request by the Director.

- 1) The permittee must furnish the Director all data necessary to determine compliance status.
- 2) The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be written and include the information listed in 10 CSR 10-6.261 (4) (A) 1.
- 3) The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3, as required by Section V of this permit.

³ Ibid.

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following are only excerpts from the regulation or code, and are provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, notice shall be given as soon as practicable prior to the activity.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall make such permit available within a reasonable period of time to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

10 CSR 10-6.110 Reporting of Emission Data, Emission Fees and Process Information

- 1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 3) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.165 Restriction of Emission of Odors

This is a State Only permit requirement.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin *Emission Limitation*:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether equipment malfunctions contributed to an exceedance.
- 3) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.250 Asbestos Abatement Projects

Certification, Accreditation, and Business Exemption Requirements This is a State Only permit requirement.

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
 - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been

- completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only 40 CFR Part 82*.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

Permit Duration

10 CSR 10-6.065(5)(C)1.B, 10 CSR 10-6.065(5)(E)3.C

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

General Record Keeping and Reporting Requirements 10 CSR 10-6.065(5)(C)1.C

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made available within a reasonable period of time to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (5)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice

- must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

Risk Management Plan Under Section 112(r) 10 CSR 10-6.065(5)(C)1.D

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

Severability Clause 10 CSR 10-6.065(5)(C)1.F

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

General Requirements 10 CSR 10-6.065(5)(C)1.G

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(5)(C)1.

Incentive Programs Not Requiring Permit Revisions 10 CSR 10-6.065(5)(C)1.H

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

Reasonably Anticipated Operating Scenarios 10 CSR 10-6.065(5)(C)1.I

There are no reasonably anticipated operating scenarios.

Compliance Requirements 10 CSR 10-6.065(5)(C)3

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Missouri Compliance Coordinator, Air Branch, Enforcement and Compliance Assurance Division, EPA Region 7, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;

- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

Permit Shield

10 CSR 10-6.065(5)(C)6

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

Emergency Provisions

10 CSR 10-6.065(5)(C)7

- 1) An emergency or upset as defined in 10 CSR 10-6.065(5)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operational Flexibility 10 CSR 10-6.065(5)(C)8

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Compliance and Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3 as well as to the Missouri Compliance Coordinator, Air Branch, Enforcement and Compliance Assurance Division, EPA Region 7, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Compliance and Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or electronically as outlined in 40 CFR Part 3 as well as to the Missouri Compliance Coordinator, Air Branch, Enforcement and Compliance Assurance Division, EPA Region 7, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

Off-Permit Changes 10 CSR 10-6.065(5)(C)9

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, by mail at P.O. Box 176, Jefferson

City, MO 65102 or electronically as outlined in 40 CFR Part 3 as well as to the Missouri Compliance Coordinator, Air Branch, Enforcement and Compliance Assurance Division, EPA Region 7, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(5)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- d) The permit shield shall not apply to these changes.

Responsible Official 10 CSR 10-6.020(2)(R)34

The application utilized in the preparation of this permit was signed by Paul Costephens, Plant Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Reopening-Permit for Cause 10 CSR 10-6.065(5)(E)6

This permit shall be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MoDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination.
- 2) MoDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or

5) MoDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

Statement of Basis 10 CSR 10-6.065(5)(E)1.C

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment A

Fugitive Emission Observations

	Time	Boundary		If There Are Visible Emissions Beyond the Property Boundary			
Date				Cause Corrective Action	Initial		
		No	Yes	7 Ketion			
					<u> </u>		

Attachment B

Method 22 Visible Emissions Observ	ations
Installation Name	Observer Name
Location	Date
Sky Conditions	Wind Direction
Precipitation	Wind Speed
Time	Emission unit

Sketch emission unit: indicate observer position relative to emission unit; indicate potential emission points and/or actual emission points.

Minute	0	15	30	45	Comments
	1	/isible Emissions	Yes (Y) or No (N)	
0					
1					
2					
3					
4					
5					
6					

If visible emissions are observed, the installation is not required to complete the entire six-minute observation. The installation shall note when the visible emissions were observed and shall conduct a Method 9 opacity observation.

Attachment C

Method 9 Opacity Observations		
Installation Name:	Sketch of the observed relative to the emiss	
Emission Point:		
Emission Unit:		
Observer Name and Affiliation:		
Observer Certification Date:		
Method 9 Observation Date:		
Height of Emission Point:		
Time:	Start of observations	End of observations
Distance of Observer from Emission Point:		
Observer Direction from Emission Point:		
Approximate Wind Direction:		
Estimated Wind Speed:		
Ambient Temperature:		
Description of Sky Conditions (Presence and color of clouds):		
Plume Color:		
Approximate Distance Plume is Visible from Emission Point:		
	l .	l.

Attachment C (continued) Method 9 Opacity Observations

	0	Sec 15	onds 30	45	1- minute	6- minute	Steam Plu	ime (check if licable)	
Minute -			gs (% Opac		Avg. % Opacity ⁴	Avg. % Opacity	Attached		Comments
0						N/A			
1						N/A			
2						N/A			
3						N/A			
4						N/A			
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28		-							
29									
30									

The emission unit is in compliance if each six-minute average opacity is less than or equal to 20/%. Exception: The emission unit is in compliance if one six-minute average opacity is greater than 20 %, but less than 60 %.

Was the emission unit in compliance at the time of evaluation (yes or no)?

Signature of Observer

⁴ 1-minute avg. % opacity is the average of the four 15 second opacity readings during the minute. ⁵ 6-minute avg. % opacity is the average of the six most recent 1-minute avg. % opacities.

⁶ Each 15 second opacity reading shall be recorded to the nearest 5% opacity as stated within Method 9.

Attachment D

10 CSR 10-6.260 and 261 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission unit is in compliance with 10 CSR 10-6.260, *Restriction of Sulfur Compounds* and 10 CSR 10-6.261, *Control of Sulfur Dioxide emissions*.

Allowable SO_x emission limitation for indirect heating sources is 8 lb/MMBtu.

i) Dryer 1 and Dryer 2:

Dryer 1 maximum firing rate = 5.4 MMBtu/hr

Dryer 2 maximum firing rate = 52 MMBtu/hr

Fuel = natural gas, sawdust and wood tar (similar to #6 fuel oil)

Sulfur content of wood tar: 0.06%

Wood tar heat content: 153 MMBtu per 1000 gal for #6 fuel oil

Tar density: 9.8 lb/gal = 9800 lb/1000 gal

Sulfur content of wood tar = 0.06%

 $= 0.06\% \times 9800 \text{ lb/gal} = 5.88 \text{ lb/gal}$

 SO_2 Content = 5.88 lb/gal x [(64 lb SO_2 /lb-mol)/32 lb S/lb-mol)]

 $= 5.88 \text{ x } (64/32) = 11.76 \text{ lb } SO_2/1000 \text{ gal}$

 SO_2 Emission = (11.76 lb $SO_2/1000$ gal) ÷ (153 MMBtu/1000 gal) = 0.077 lb/MMBtu

ii) Calciners burners:

Maximum firing rate of All (6) calciners = 46.1 MMBtu/hr

Fuel = natural gas, sawdust and wood tar

Sulfur content of wood tar condensate = 0.14%

Max amount of wood tar condensate burned per hour = 7.5 gal/hr (combusted in all six calciners)

Duration of burnout for all calciners = 12 hours

SO₂ Emission factor #6 Fuel Oil = 157s +2s (AP-42, §1.3 Fuel Oil Combustion, Table 1.3-1)

SO₂ Emission = $(159 \times 0.14) \times (7.5/1000) = 0.167 \text{ lb/hr}$ = $(0.167 \text{ lb/hr}) \div (46.1 \text{ MMBtu/hr}) = 0.004 \text{ lb/MMBtu}$

The above calculations show that the dryers and calciners potential SO_2 emission rates in lb/MMBtu are much less than the allowable SO_2 emission limit.

Attachment E

				1
Inspection	/Maintenanc	e/Repair/	Malfuncti	on Log

Emission	Unit#		

Date/Time	Inspection/ Maintenance	Malfunction Activities					
	Maintenance Activities	Malfunction	Impact	Duration	Cause	Action	Initials

STATEMENT OF BASIS

Installation Description

Kerry Ingredients & Flavours owns and operates a liquid smoke manufacturing facility in Greenville, Missouri. Kerry acquired the Missouri facility from Hickory Specialties, Inc. in 2001.

Liquid smoke is produced by burning hardwood sawdust in an oxygen deficient atmosphere (pyrolysis) in a series of calciners. The smoke generated by these calciners is condensed and then refined to create the liquid smoke product.

The facility receives hardwood sawdust via bulk trucks, which are unloaded, transferred to storage bins, screened and dried. The sawdust dryers are fired with a mixture of wood tar, sawdust and natural gas. After drying, the sawdust is transferred to one of the facility's six calciners where the sawdust is pyrolyzed to generate smoke from which the final product is derived. This smoke is directed through a scrubbing tower attached to each calciner where the smoke is condensed. A flare controls VOC & CO emissions from the scrubber. The resulting product (liquid smoke) is then sent to a tank farm for aging, concentration via an evaporator, and sometimes dilution with water. From the tank farm, the product is filtered and blended within various in-process storage tanks. The finished product is then packaged and shipped to customers. The leftover char from calcining the sawdust is sold as a byproduct to a charcoal briquette company.

Kerry Ingredients and Flavours is a major source for Carbon Monoxide. The installation does not emit a significant amount of HAP.

Updated Potential to Emit for the Installation and Reported Air Pollutant Emissions, in tons per year

Delletente	Potential	Reported Emissions ²				
Pollutants	Emissions ¹	2019	2018	2017	2016	2015
Particulate Matter \leq Ten Microns (PM ₁₀)	75.99	28.65	38.70	33.09	33.09	24.08
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	57.57	23.40	34.81	29.84	29.84	22.11
Sulfur Oxides (SO _x)	8.01	2.43	2.76	2.32	2.32	1.74
Nitrogen Oxides (NO _x)	38.70	16.09	9.83	8.81	8.81	6.51
Volatile Organic Compounds (VOC)	78.72	48.40	35.97	30.89	30.89	22.27
Carbon Monoxide (CO)	118.73	39.20	30.71	26.73	26.73	19.74
Hazardous Air Pollutants (HAPs)	1.16	0.00	0.00	0.00	0.00	0.00

Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

[•] Emissions from the generator are evaluated at 500 hours of operation.

Although the reported emissions include no values for Hazardous Air Pollutants, the installation did emit Hazardous Air Pollutants during the years 2015-2019. The HAPs emissions were reported as VOCs on Form 2T pages of the Emission

Inventory Questionnaires in the applicable years.

The installation submitted reduced reporting for 2017, in accordance with 10 CSR 10-6.110

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received June 22, 2020;
- 2) 2019 Emissions Inventory Questionnaire, received May 14, 2020;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 4) Air Pollution Control Program Construction Permits Issued to the Liquid Smoke Production Facility in Wayne County:

Permit Number	Description
0983-010 to	Issued on September 13, 1983 to Griffith Laboratories U.S.A., Inc. to construct
0983-014	and operate a liquid smoke production facility. (Project #4960-0019-005)
1094-013	Issued on October 14, 1994 to Hickory Specialties, Inc. to install a third calciner.
	(Project #4960-0019-006)
082008-004	Issued on August 4, 2008 to Mastertaste, IncGreenville to install one calcinator
	and increase the installation's sawdust handling limit. (Project #2007-10-001)
Project # 2008-04-059	Confidentiality for 2007-10-101, approved on May 30, 2008.
082008-004A	Amendment/Corrections to Permit No. 082008-004 completed October 29, 2008.
	(Project #2008-08-002)
082008-004B	Amendment/Corrections to Permit No. 082008-004 completed February 2, 2010.
	(Project #2009-12-045)
082008-004C	Amendment/Corrections to Permit No. 082008-004 completed February 2, 2010.
	(Project #2013-02-046)
Project #2015-08-003	Determination of permit need for the construction of a 3.35 MMBtu/hr mixed
	paper-fueled sawdust dryer. Completed November 6, 2015.
082018-008	Issued on August 7, 2018 for increase in production of liquid smoke flavoring.
	(Project #2017-12-014)

5) Air Pollution Control Program Operating Permits Issued to the facility:

Permit Type	Project No.	Date Received/Issued
Initial Basic Operating Permit	1998-05-156	May 5, 2011/February 13, 2013
Renewal Basic Operating Permit	2002-11-083	November 8, 2002/December 20, 2002
Renewal Basic Operating Permit	2007-07-075	July 13, 2007/October 9, 2007
Basic Operating Permit	2008-05-046	Completed on August 29, 2008
Amendment – Responsible		
Official Change		
Renewal Basic Operating Permit	2011-12-005	December 14, 2011/May 15,2012
Renewal Basic Operating Permit	2017-05-017	May 5, 2017/June 19, 2017

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

None.

Construction Permit History

There were no revisions made to construction permits for this installation in this operating permit.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, New Source Performance Regulations

1) 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

This subpart is applicable to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons who construct, reconstruct, or modify an engine after July 11, 2005. A compression ignition is a type of stationary internal combustion engine that is not a spark ignition engine.

Kerry has one diesel-fired, 230 Kw 1983 model compression ignition internal combustion engine (emergency generator EU-9). The engine was neither constructed, reconstructed, nor modified after July 11, 2005. Therefore, this subpart does not apply.

2) 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

This subpart is applicable to owners and operators of stationary spark ignition (SI) internal combustion engines (ICE) who construct, reconstruct, or modify an engine after July 12, 2006. A stationary internal combustion engine is any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Kerry does not operate a spark ignition internal combustion engines. Therefore, this subpart does not apply.

Maximum Achievable Control Technology (MACT) Applicability

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations

1) 40 CFR Part 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers.

The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994, and are either major sources or are integral parts of facilities that are major sources as defined in 40 CFR 63.401.

The cooling tower located at this installation does not use chromium-based water treatment chemicals; therefore, this rule does not apply.

water.

2) 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

The Subpart ZZZZ standards are applicable to Reciprocating Internal Combustion Engines (RICE).

The Subpart ZZZZ standards are applicable to Reciprocating Internal Combustion Engines (RICE) located at both major and/or area sources of hazardous air pollutants (HAPs) and RICE with a site rating of less than or equal to 500 brake horsepower (bhp). In addition, the standards for existing non-emergency compression ignition (CI) engines with a site rating of greater than 500 bhp at major sources and revised provisions related to Startup, Shutdown, and Malfunction (SSM) events for engines previously regulated under the rule. Finally, emergency RICE with a rating greater than 500 bhp located at a major source are subject to this rule, but with limited requirements.

The installation has one diesel-fired, 1983 Model emergency generator. Therefore, this subpart does apply to the emergency generator.

3) 40 CFR Part 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.

The Subpart applies to a facility that owns or operates a industrial boilers, institutional boilers, commercial boilers, and process heaters that is a major source, or is located at a major source, or is part of a major source of HAP emissions. A process heater is defined as a unit in which the combustion gases do not directly come into contact with process material or gases in the combustion chamber (e.g., indirect fired). A boiler is defined as an enclosed device using controlled flame

The provisions of 40 CFR Part 63, Subpart DDDDD do not apply to the process heater because these process heaters are located at a facility whose regulated activities presented in this permit application potentially emit less than the major source thresholds for HAPs.

combustion and having the primary purpose of recovering thermal energy in the form of steam or hot

4) 40 CFR Part 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. This subpart applies to boilers at area source facilities that burn coal, oil, biomass, or non-waste materials. Boilers burning natural gas as defined in this regulation would not be affected by the subpart.

A boiler is defined in § 63.11237 of this subpart as means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Waste heat boilers, process heaters, and autoclaves are excluded from the definition of boiler. Therefore, the process heaters are not subject to this subpart.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61 Subpart M – National Emission Standard for Asbestos.

The installation is not subject to any NESHAP standard with the exception of Subpart M - National Emission Standard for Asbestos. The installation is potentially subject to Subpart M. If the installation conducts any demolition or renovation projects to a building(s) containing asbestos, they must determine applicability with the following NESHAP regulations:

• Demolition and Renovation - 40 CFR 61.145

• Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying - 40 CFR 61.150

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.
 40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control

device to achieve compliance with a relevant standard.

Greenhouse Gas Emissions

Note that this source is subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO₂ emissions were not included within this permit. The applicant is required to report the data directly to EPA. The public may obtain CO₂ emissions data for this installation by visiting http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html.

Other Regulatory Determinations

1) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants* is applicable to the installation, but has not been applied within this permit for the following emission units.

Emission Unit	Description	10 CSR 10-6.220 Applicability
EU-09	Emergency Generator - Internal Combustion Engine (Distillate Oil)	10 CSR 10-6.220(1)(A) exempts stationary internal combustion engines.
EU-10 & EU-11	Natural gas-fired hot water heaters	These sources are subject to this regulation. However, emission units combusting natural gas are assumed to be in compliance with this regulation
EU-7	Evaporator	without any monitoring.
EU-01,	Miscellaneous Fugitive	10 CSR 10-6.220(1)(K) exempts fugitive sources
EU-01A,	Emission Sources	subject to 10 CSR 10-6.170.
EU-4		
EU-8	Cooling Tower	The regulation is applicable to the cooling tower, but was not applied within this permit. The cooling tower during normal operation emits little or no visible emissions. The cooling tower can emit large amounts of water vapor which make it difficult to determine if/how much visible contaminant is being emitted. The Air Pollution Control Program is not requiring any monitoring, record keeping, or reporting for the cooling tower at this time; but, should visible emissions become an issue, these requirements may be added in the future.

For units that are subject to 10 CSR 10-6.220, visible emissions observations will be performed in frequencies as stated in Permit Condition 001 and logged according to the monitoring and record keeping requirements. Detecting visible emissions is an indicator of operating problems and gives the permittee a chance to take corrective actions before exceeding the opacity limit. Conducting Method 9 observations after the observation of visible emissions determines whether the emissions exceed the opacity limit, or confirm that corrective action has restored operation. Therefore, the tiered monitoring frequency of visible/no visible emissions observations using Method 22 like procedures is considered sufficient.

2) 10 CSR 10-6.260, Restriction of Emissions of Sulfur Compounds and 10 CSR 10-6.261, Control of Sulfur Dioxide Emissions.

10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and thus are federally enforceable and applicable to the installation. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action

- a) Compliance demonstration of the allowable 8 lb/MMBtu SO_x emission limitation:
 - i) Dryer 1 and Dryer 2:

Dryer 1 maximum firing rate = 5.4 MMBtu/hr

Dryer 2 maximum firing rate = 52 MMBtu/hr

Fuel = natural gas, sawdust and wood tar (similar to #6 fuel oil)

Sulfur content of wood tar: 0.06%

Wood tar heat content: 153 MMBtu per 1000 gal for #6 fuel oil

Tar density: 9.8 lb/gal = 9800 lb/1000 gal

Sulfur content of wood tar = 0.06%

 $= 0.06\% \times 9800 \text{ lb/gal} = 5.88 \text{ lb/gal}$

 SO_2 Content = 5.88 lb/gal x [(64 lb SO_2 /lb-mol)/32 lb S/lb-mol)]

 $= 5.88 \text{ x } (64/32) = 11.76 \text{ lb } SO_2/1000 \text{ gal}$

 SO_2 Emission = (11.76 lb $SO_2/1000$ gal) ÷ (153 MMBtu/1000 gal) = 0.077 lb/MMBtu

ii) Calciners burners:

Maximum firing rate of All (6) calciners = 46.1 MMBtu/hr

Fuel = natural gas, sawdust and wood tar

Sulfur content of wood tar condensate = 0.14%

Max amount of wood tar condensate burned per hour = 7.5 gal/hr (combusted in all six calciners)

Duration of burnout for all calciners = 12 hours

SO₂ Emission factor #6 Fuel Oil = 157s +2s (AP-42, §1.3 Fuel Oil Combustion, Table 1.3-1)

 SO_2 Emission = (159 x 0.14) x (7.5/1000) = 0.167 lb/hr

 $= (0.167 \text{ lb/hr}) \div (46.1 \text{ MMBtu/hr}) = 0.004 \text{ lb/MMBtu}$

The above calculations show that the dryers and calciners potential SO₂ emission rates in lb/MMBtu are much less than the allowable SO₂ emission limit.

- b) Evaporator (Natural Gas-fired 1.9 MMBtu/hr Process Water Heater)
 According to 10 CSR 10-6.260(1)(A)(2) and 10 CSR 10-6.261(1)(A), natural gas fired sources
 are exempt from the requirements of these rules. The permittee is required to comply with the
 record keeping requirement in 10 CSR 10-6.261(4) for SO₂ emitting sources combusting natural
 gas to determine the exception in 10 CSR 10-6.261(1)(A)
- c) Emergency Generator:

 The permittee is in compliance with the SO₂ emissions limit of 500 ppmv averaged on any consecutive 3-hour period and SO₃ /H₂SO₄ limit of 35 mg/m3 averaged on any consecutive

consecutive 3-hour period and SO₃ /H₂SO₄ limit of 35 mg/m3 averaged on any consecutive 3-hour period for fuel oil of 10 CSR 10-6.260(3)(A)2 and also with the 8,812 ppm sulfur limit of 10 CSR 10-6.261(3)(C). The permittee has and will continue to purchase low sulfur fuel oil (i.e., \leq 15 ppmv sulfur content) to meet the limit of this rule.

3) 10 CSR 10-6.405, Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating.

According to 10 CSR 10-6.405(1)(C), an installation is exempt from this rule if all of the installation's applicable units arc fueled only by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2 %) sulfur), or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent or any combination of these fuels.

All the indirect heating sources operated at this installation exclusively combust natural gas, sawdust and wood tar condensate. The maximum sulfur content of wood tar condensate is 0.14% which is less than the exempt fuel oils sulfur content of 1.2%. Therefore, the installation would not be subject to this rule.

4) 10 CSR 10-6.400, Restriction of Emission of Particulate Matter From Industrial Processes 10 CSR 10-6.400 limits the amount of particulate matter that is allowed from an emission unit, and is dependent on the process weight rate material processed. The emission units to which this rule applies are listed below. The following calculations provide the allowable particulate emission rate based on 10 CSR 10-6.400 and the potential (maximum) emission rate including particulate emission control equipment. Potentials to emit presented below were calculated based on sources Maximum Design Rate (MDR). If the emissions from these emission units can not violate the limits of this rule then evidence of this is demonstrated in the following calculations.

One of the following equations from 10 CSR 10-6.400 is used to calculate the PM allowable limit:

 $E = 4.10P^{0.67}$ for process weight rates up to 30 tons (60,000 lbs) per hour, and

 $E = 55.0P^{0.11} - 40$ for process weight rates greater than 30 tons (60,000 lbs) per hour

Where: E = rate of emission in lb/hr; and

P = process weight rate in tons/hr (maximum hourly design rate)

a) EU-2A and EU-2B Dryers - The dryers are equipped with high efficiency cyclones. The high efficiency cyclones are integral to the processes, with their purpose solely as the step to separate feedstock from the process air in which it was entrain as part of the drying process. The cyclones are used to recover as much dried sawdust as possible.

Max wet sawdust throughput to Dryer 1 = 3 tons/hr

Max wet sawdust throughput to Dryer 2 = 20 tons/hr

```
Dryer 1 PM Emission factor = 165.74 lb/ton (Engineering Calculation, 2019 EIQ) Dryer 2 PM Emission factor = 62.29 lb/ton (Engineering Calculation, 2019 EIQ) Cyclone Control Efficiency = 99% E_{Dryer 1} = 4.10 \text{ x } (3)^{0.67} = 8.56 \text{ lbs/hr} E_{Dryer 2} = 4.10 \text{ x } (20)^{0.67} = 15.10 \text{ lbs/hr} Dryer 1 PM Emission = 3 tons/hr x 165.74 x (1-0.99) = 4.97 lb/hr Dryer 2 PM Emission = 20 tons/hr x 62.29 lb/ton = 12.58 lb/hr
```

At maximum design rates, the potential PM emission rates for the dryers (EU-2A and EU-2B) (Dryers) are less than their corresponding allowed PM emission rates. According to 10 CSR 10-6.400(1)(B)16, the provisions of this rule shall not apply to emission units that at maximum hourly design rate have an uncontrolled potential to emit less than the allowable emissions as calculated in paragraphs (3)(A)1. and (3)(A)2. of this rule. Therefore, these units are not subject to the provisions of this rule.

- b) EP-3 Calciners:
 - Calciners Hood Vent (Tube Leakage) Calciners 1-4 do not have a complete seal around the kiln and some leakage occurs. The vapor is made up of condensable and non-condensable gases.

Maximum feed rate of dry sawdust = 3.5 tons/hr PM Emission factor = 1.28 lb/ton (engineering calculation, 2019 EIQ) $E = 4.10 \text{ x } (3.5)^{0.67} = 9.49 \text{ lbs/hr}$ PM Emission = (3.5 tons/hr x 1.28 lb/ton) = 4.48 lbs/hr

At maximum design rates, the uncontrolled potential PM emission rates for the calciners hood vent is less than the allowable PM emission limit. Therefore, it is not subject to the provisions of this rule according to 10 CSR 10-6.400(1)(B)16.

ii) Calciners Flare -

Maximum feed rate of dry sawdust = 3.5 tons/hr PM Emission factor = 0.02 lb/ton (engineering calculation, 2019 EIQ) $E = 4.10 \text{ x } (3.5)^{0.67} = 9.49 \text{ lbs/hr}$ PM Emission = (3.5 tons/hr x 0.02 lb/ton) = 0.07 lbs/hr

At maximum design rate, the uncontrolled potential PM emission rates for the calciners flare is less than the allowed exemption level of 10 CSR 10-6.400(1)(B)11. (i.e., 0.5 lbs/hr), therefore this unit is not subject to the provisions of this rule.

c) Hammer Mill - "Overs" from the shaker screen are routed through the hammer mill for additional crushing before going to the dryer. The hammer mill is controlled with a small baghouse system. Maximum feed rate of dry sawdust = 3.5 tons/hr

```
PM Emission factor = 0.02 lb/ton (engineering calculation, 2019 EIQ) E = 4.10 \text{ x } (3.5)^{0.67} = 9.49 \text{ lbs/hr} PM Emission = (3.5 tons/hr x 0.02 lb/ton) = 0.07 lbs/hr
```

At maximum design rates, the uncontrolled potential PM emission rates for the Hammermill is

less than the allowed exemption level of 10 CSR 10-6.400(1)(B)11. (i.e., 0.5 lbs/hr), therefore, it is not subject to the provisions of this rule.

d) According to 10 CSR 10-6.400(1)(B)7., the following fugitive sources are not subject to this rule.

Emission Unit	Description of Emission Unit
EU-1	Sawdust Truck Unlading Area (Sawdust Delivery, Storage, and Sizing)
EU-1A	Haul Roads
EU-4	Charcoal Loading
EU-5	Production Storage Tanks
EU-8	Cooling Towers

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1. The specific pollutant regulated by that rule is not emitted by the installation;
- 2. The installation is not in the source category regulated by that rule;
- 3. The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4. The installation does not contain the type of emission unit which is regulated by that rule;
- 5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments

The draft P70 Operating Permit, Project 2020-06-036, for Kerry Ingredients & Flavours (223-0019) was placed on public notice as of March 12, 2021, for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: http://dnr.mo.gov/env/apcp/permit-public-notices.htm, on March 12, 2021, the Air Pollution Control Program received comments from the United States Environmental Protection Agency, Region 7 (EPA). The comments are addressed in the order in which they appear within the letter and are quoted verbatim.

Comment #1: It is the MoDNR's customary practice to include and specify the regulated air pollutant(s) that make a facility major, and therefore, subject to a Part 70 operating permit in the Installation Description on the permit cover sheet and in the Statement of Basis. However, the Installation Description on both the cover page and Statement of Basis of this draft does not indicate the pollutant(s) which create the need for this Part 70. Therefore, the EPA recommends the MoDNR to consider following their customary practice and list the major air pollutant(s) in the Installation Descriptions of this permit.

Response to Comment: Kerry Ingredients & Flavours is a major source of carbon monoxide; and the statement is included in the Installation Description and the Statement of Basis as recommended.

Comment #2: Permit Condition 006 incorporates requirements from 10 CSR 10-6.075, Maximum Achievable Control Technology Regulations, and 40 CFR part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, that apply to Emission Unit EU-9: Temporary Generator. Kerry Ingredients & Flavours appears to be an area source of hazardous air pollutants (HAPs), and 10 CSR 10-6.075 indicates the EPA as the controlling authority for area sources subject to 40 CFR part 63, Subpart ZZZZ. Therefore, the EPA should be the primary recipient of the reports required by Permit Condition 006. It should also be noted that §63.6650(h)(3) requires annual reports be submitted electronically using the Compliance and Emission Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX). The EPA recommends the MoDNR to consider these modifications to Permit Condition 006.

Response to Comment: Changes to the Permit Condition 006 has been made as a result of this comment. The requirements in $\S63.6650$ (h)(1) through (3) except $\S63.6650$ (h)(1) (v) and (vi) have been included to the reporting section of Permit Condition 006.